

## **MERCHANDISING STRIP WITH LOCKING TAB**

### **BACKGROUND OF THE INVENTION**

#### **FIELD OF THE INVENTION**

[0001] The present invention relates to point of purchase display systems. More particularly, the invention relates to strip merchandisers for product display.

#### **DISCUSSION OF THE ART**

[0002] Small items of merchandise, such as blister packs, are often displayed in stores on merchandise strips. Merchandise strips generally consist of an elongate plastic strip, which is suspended from the front edge of a merchandise display shelf, or the like. The strips are usually made from a die cut plastic material and have a series of spaced cut lines. When the material is pushed out of the plane of the strip it forms integral upwardly facing individual tongues that act as support hooks for the products. Adjacent each upwardly facing hook or tongue can be a pair of downwardly facing tongues. The various tongues are generally defined in the strip merchandiser by a continuous cut line. The downwardly facing tongues can serve to prevent the package, once it is suspended from the upwardly facing tongue, from being detached therefrom during transit and display. The downwardly facing tongues have to be pushed out of the way in order to allow the package to be unhooked from the upwardly facing tongue. Examples of such strips are shown in U.S. Patent Nos. 5,103,970, 5,199,578, 5,284,259, and 6,145,675.

[0003] At their upper end, the strips have a mounting portion for attaching the strip to the shelf, or other stationary support. The mounting portion has an aperture, through which a screw, hook or other fixing member

is selectively inserted to attach the merchandise strip to price channels, shelves, walls, gondolas, or wire racks by the retailer.

[0004] Particularly where the merchandise strip is to be removed at intervals, it is convenient for the strip to be attached to the shelf without the need for separate fixing members. For example, U.S. 4,911,392 disclosed a strip merchandiser with a reinforced portion, which defines an arrowhead formation that can be pressed into an aperture on the shelf. There is a tendency, however, for the strip to become disengaged in use, or under the weight of heavy items of merchandise.

[0005] Information tags have been developed which allow the tag to be mounted without separate fixing members. U.S. 4,869,007, for example, discloses a merchandise information tag for use with a wire type rack. The tag has two tabs which slot into corresponding apertures on a display portion of the tag. Such tags, however, are disadvantageous in that the tabs tend to disengage from the apertures and the tag readily becomes disengaged from the shelf. Additionally, such systems are generally unsuited to supporting the weight of items of merchandise. Rather, they are used to display lightweight items such as small card or paper strips.

[0006] Accordingly, it has been considered desirable to develop a new and improved strip merchandiser which would overcome the foregoing difficulties and others while providing better and more advantageous overall results.

## SUMMARY OF THE INVENTION

[0007] In accordance with one aspect of the present invention, a merchandising strip is provided. The merchandising strip includes a planar body portion with an aperture. At least one finger is associated with the body portion for supporting an associated package. A tab is provided for mounting the merchandising strip to an associated support member. The tab includes a strap having a first end extending from the body portion. A head located at a

second end of the strap is shaped to be received through the aperture. The head has a transverse width which is greater than a transverse width of the aperture at a widest point of the aperture. The transverse width of the aperture is greatest at an end of the aperture closest to the strap.

[0008] In accordance with another aspect of the present invention, a merchandising strip is provided. The merchandising strip includes a tab for mounting the merchandising strip to an associated support member. The tab includes a strap and a head at a distal end of the strap. A body portion has an aperture for receiving the strap therethrough. The body portion is connected with the tab. The aperture has a length which is greater than a maximum transverse width of the head. The aperture defines a widened portion having a maximum transverse width which is intermediate a transverse width of the strap and the maximum transverse width of the head. A narrow portion of the aperture extends from the widened portion. The narrow portion has a transverse width which is less than the transverse width of the strap. At least one engagement means is associated with the body portion for supporting an associated package.

[0009] In accordance with another aspect of the present invention, a method of supporting a plurality of packages from a rigid support member is provided. The method includes providing a merchandising strip comprising a body portion and an elongate strap connected therewith, the body portion defining an aperture for receiving a head at a distal end of the strap. A portion of the support member is encircled with the elongate strap of the merchandising strip. The head of the strap is inserted through the aperture in the body portion with the head positioned such that its transverse width is oriented in a direction which is generally parallel with a longitudinal axis of the merchandising strip. The maximum transverse width of the head is greater than a maximum transverse width of the aperture. Once the head has passed through the aperture, the head is rotated such that its transverse width is generally perpendicular to a longitudinal axis of the merchandising

strip. A plurality of packages is releasably supported on the merchandising strip.

[00010] The advantages of the present invention will be readily apparent to those skilled in the art, upon a reading of the following disclosure and a review of the accompanying drawings.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

[00011] FIGURE 1 is a front elevational view of a merchandising strip according to a first embodiment of the present invention;

[00012] FIGURE 2 is an enlarged front perspective view of the merchandising strip of Fig. 1 attached to a rail, illustrating a plurality of attached products;

[00013] FIGURE 3 is an enlarged rear perspective view of an upper end of the merchandising strip of FIG. 1, attached to a rail;

[00014] FIGURE 4 is an enlarged front elevational view of an upper end of the merchandising strip of FIG. 1; and

[00015] FIGURE 5 is a front elevational view of a second embodiment of a merchandising strip according the present invention.

### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

[00016] Referring now to the drawings wherein the showings are for purposes of illustrating the preferred embodiments of the invention only and not for purposes of limiting same, FIG. 1 shows a merchandising strip 10 suited to supporting and displaying one or more vertically spaced packaged items, such as packages of snack foods, batteries, household items, and the like from a rail, shelf, or other support surface.

[00017] The merchandising strip **10** includes an elongate, generally planar body portion **12** and a mounting portion in the form of a tab **14**, which extends axially from the body. In the illustrated embodiment, the body portion **12** takes the form of an elongated strip of material which is substantially longer than it is wide and has front and rear planar surfaces **16, 18** (FIGS. 1 and 3).

[00018] With continuing reference to FIG. 1, a series of axially spaced merchandise engagement means **20** is provided on the body portion **12**. The engagement means **20** illustrated in FIG. 1 each comprise a generally W-shaped cut line. Each cut line defines a centrally located, upward facing finger or tongue **22** and a pair of adjacent, downward facing side stabilizing fingers **24, 26**. Although a single column of cut lines **20** is illustrated in FIG. 1, it is to be appreciated that two or more rows of cut lines may be provided, as shown in FIG. 5.

[00019] With reference now to FIG. 2, packages **30** meant to be suspended from the merchandising strip **10** are generally provided with a reduced thickness region **32**, with a suitably positioned central aperture **34**, located at an upper end of the package. To hang the package on the merchandise strip, the tongue **22** is bent outward slightly from the front face **18**. The central tongue **22** protrudes through the package aperture **34** in the reduced thickness region **32**, and the package hung by its aperture, as illustrated in FIG. 2. The two side stabilizing fingers **24, 26** are used to grip the upper end **32** of the package between the fingers and the adjacent body portion **12**.

[00020] It is contemplated that alternative engagement means may be provided. The alternative engagement means may be integrally formed with and in the same plane as the body, such as an inverted U-shaped cut line, or extend from the body and/or be attached to the body, such as a clip. Examples of such alternative engagement means are shown, for example, in U.S. Patent Nos. 5,103,970 and 6,145,675, which are incorporated herein in their entireties by reference.

[00021] With reference now to FIG. 4, the mounting tab 14 includes an elongate strap 40 in the same plane as the body portion 12. The strap terminates in an arrowhead-shaped head 42, tapered inward toward its tip 43. The tip can be flattened, as shown, or a pointed tip can be used (not shown). As illustrated in FIG. 3, the strap 40 is of sufficient length and flexibility to allow it to be looped around a suitable rigid horizontal support surface, such as a rail 44. Alternatively, the strap can be passed through a suitable aperture adjacent an edge of a shelf (not shown). As shown in FIG. 2, the head 42 is received through an aperture 46, which may be cut out or otherwise formed in an upper end 48 of the body portion 12 above the engagement means.

[00022] As shown in the enlarged view of FIG. 4, the aperture 46 can extend axially, or generally axially, along the body portion 12, *i.e.*, its longest dimension  $l$  is aligned no more than  $20^\circ$ , preferably no more than  $10^\circ$ , from the axis **X** of the strip 10. In the illustrated embodiment, the longest dimension of the aperture 46 is aligned with the axis **X** of the strip. The length  $l$  of the aperture is equal to or slightly in excess of the transverse width  $w_1$  of the head, measured at its widest point, and is arranged generally perpendicular thereto.

[00023] The aperture 46 includes a widened upper portion 50, having the generally shape of an inverted triangle, tapering inward toward its lower end, and being widest at an engagement surface 51 at an upper end thereof. The widened portion 50 is narrower, in all directions, than the maximum transverse width  $w_1$  of the head (all widths and lengths referred to herein are determined in the plane of the merchandise strip). A narrow slit 52 extends downward from the widened upper portion, in a generally axial direction, and has a transverse width  $w_3$ . The upper portion 50 has a transverse width which, at its widest point  $w_4$ , is equal to or slightly wider than a width  $w_2$  of the strap 40 and which is less than the width  $w_1$  of the head. The transverse width  $w_3$  of the slit 52 is sufficient to allow the head therethrough only when

the head is twisted to an orientation in which the head is orientated generally perpendicular to the plane of the body portion. The width  $w_3$  is thus equal to or slightly greater than the thickness  $t$  of the head (as measured perpendicular to the plane of the merchandising strip), and is less than the transverse width  $w_1$  of the head, the width  $w_2$  of the strap 40, and the width  $w_4$  of the engagement surface. In an alternative embodiment (not shown) the triangular upper portion can be oriented with the engagement surface lowermost and the slit extending upward from the apex of the triangle (i.e., the entire aperture could be inverted).

[00024] To attach the merchandise strip to the rail, the strap is looped around the rail and the head 42 positioned such that its widest dimension  $w_1$  is axially aligned with, and perpendicular to an axial length  $l$  of the aperture 46. The head 42 is then passed through the aperture 46. Once the head is fully through the aperture, the head is moved upward, or moves upward, until the strap 40 is located in the triangular portion 50. The strap 40 can then be rotated, or allowed to rotate under its own momentum, until the head 42 is in the position illustrated in FIG. 3, i.e., with its widest dimension generally parallel to and generally flush with or contacting the engagement surface at the upper end of the aperture 51.

[00025] In this position, shoulders 54, 56 of the head 42 engage adjacent surfaces of the body portion 12, thereby resisting removal of the strap 40 from the aperture 46. A downward force on the merchandising strip 10, such as may be applied by the weight of packages, or intermittently, by a user, urges the head 42 to move closer to the upper end 51 of the aperture, further resisting twisting of the head and accidental removal of the strap 40. The inserted strap 40 is most stable in the position shown in FIG. 3, thus resisting twisting which would bring the head 42 to a position in which it is in vertical alignment with the aperture length  $l$ . Since the triangular upper portion 50 is not wide enough for the head to pass through, even if the strap shifts slightly, the strap is locked to the base portion 12 until a user applies sufficient

rotational force to the head to twist the strap until the widest portion of the head is in vertical alignment with the aperture length *l*. Then, the head has to be moved downwardly in relation to the aperture 46 so that the adjacent shoulder (54 or 56) clears the engagement surface 51. The head can then be passed back through the aperture 46 and the merchandising strip removed from the rail.

[00026] With reference once more to FIG. 1, widthwise creases 60 in opposite directions or perforations can be provided at spaced intervals on the body portion 12 so that the body is fan-foldable in sections 62, 64, 66, 68. In one embodiment, the creases are provided after the third and every subsequent three engagement means 20. Optionally, the body portion can be torn away sequentially at the perforations 60 after packages have been removed from one or more of the lower sections 68, 66 so as to reduce the length of the merchandising strip and provide an appealing merchandise display which remains substantially full of packages.

[00027] As will be appreciated, in the event that a suitable horizontal rail 44 or shelf aperture is not available for looping the strap 40 around or through, the aperture 46 in the body portion can be used in conventional fashion to receive a screw or hook, or other suitable fixing member therethrough for attaching the merchandising strip 10 to a suitable rigid support surface.

[00028] In one embodiment, the merchandising strip 10 is made from a suitable, conventional thermoplastic material, such as polypropylene, by a suitable conventional process such as injection molding. The body portion 12 and mounting tab 14 can be integrally formed, for example by die-cutting the entire merchandising strip from a sheet of a suitable plastic material. Alternatively, the strip 10 can be vacuum formed. Also, the body portion 12 and mounting tab 14 can be separately formed and heat welded, glued, or otherwise securely attached to each other. While FIG. 1 illustrates a single



mounting tab 14, it will be appreciated that two or more mounting tabs may be employed, as illustrated in FIG. 5.

[00029] With reference now to FIG. 5, an elongated merchandising strip according to a second embodiment of the present invention is shown. For ease of understanding an appreciation of this embodiment, like components are identified by like numerals with a primed suffix (') and new components are identified by new numerals. A merchandising strip 10' has an elongated body portion 12', which is divided into two or more sections 70, 72, by one or more respective perforation lines or fold lines 74. If perforation lines are provided, one of the portions 70, 72 can be torn from the other, along the perforation line 74, to create two merchandise strips 10, similar to that illustrated in FIG. 1. The fold line 74 would enable one of the portions to be oriented into a different plane than the adjacent portion. Alternatively, the merchandising strip 10' is attached to the same rail 44 or to a pair of adjacent shelf apertures, by two (or more) side by side tabs 14' which are inserted in two (or more) corresponding apertures 46'.

[00030] In addition, for particularly heavy or bulky items being held on a wider merchandising strip, two tabs can be provided on the strip. Such a design would enable the strip to stably support the heavy or bulky items when mounted on a suitable support structure, which can be any of the various kinds discussed above.

[00031] With reference once more to FIG. 2, a display tag 80 can be mounted to the merchandise strip 10, 10' in a location which is between the aperture 46 and the uppermost engagement means 20. The tag 80 may be used to display pricing and/or product information relating to the associated packages, or the like. The tag is slidably mounted on the body portion 12, prior to attaching the packages. For this purpose, the display tag 80 has upper and lower parallel horizontal cut lines 82, 84, of a suitable width to receive the body portion therethrough.

[00032] The invention has been described with reference to preferred embodiments. Obviously, modifications and alterations will occur to others upon the reading and understanding of the preceding specification. It is intended that the invention be construed as including all such alterations and modifications insofar as they come within the scope of the appended claims or the equivalents thereof.